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REMARKS

In response to the Office Action of October 6, 2006, the Applicant submits this Reply. In view of the following remarks, reconsideration is requested.

Claims 1-6 remain in this application, of which claims 1 and 4 are independent. No fee is due for claims for this amendment.

Rejection Under 35 U.S.C. §102

Claims 1-6, of which claims 1 and 4 are independent, were rejected under 35 U.S.C. §102 in view of U.S. Patent 6,654,028 ("Yamakawa"). The rejection is respectfully traversed.

The Office Action relies primarily on Fig.1, and col. 14, lines 33-47 of Yamakawa, which is the following:

> "In the above-mentioned apparatus, by the way, since the signal levels are related to not the brightness but a color saturation degree with respect to the two color-difference signals (R-Y) and (B-Y), the two color-difference signals (R-Y) and (B-Y) cannot be processed by the gamma correction similarly to the luminance signal (Y). However, it is considered that when only the luminance signal (Y) is increased by the correction, for example, the color saturation degree is lowered relatively to thereby cause colors to become plain. Therefore, with respect to the two color-difference signals (R-Y) and (B-Y), by the provision of a color gain control circuit in which the gain of input and output characteristics is increased as the control signal (voltage) Vc, for example, is increased, it is possible to solve the problem in which the color saturation degree is lowered relatively."

According to Yamakawa, a composite video signal is separated to provide a luminance signal and two color difference signals. See *Yamakawa*, abstract. The luminance signal is provided to dynamic gamma circuit. See *Yamakawa*, abstract. The gamma-corrected luminance signal and the two color difference signals are converted to RGB signals to be displayed. See *Yamakawa*, abstract. In the dynamic gamma circuit, "the gamma correction curve is controlled in response to the average luminance level of the video signal to be displayed." *Yamakawa*, col. 14, lines 23-25. The purpose of *Yamakawa* is to make objects more visible in a scene where there is low luminance. See *Yamakawa*, col. 14, lines 24-31. Notably, in the various embodiments shown in *Yamakawa*, this is implemented by some form of feedback loop in which one or more parts of the video signal are combined to provide a control input to the dynamic gamma circuit 5, and optionally a color gain control circuit 13. See Figs. 5-11

According to Yamakawa, in the portion cited above, if the gamma correction increases luminance, then saturation decreases (due to a decrease in R-Y and B-Y). Accordingly, a color gain circuit is used to modify R-Y and B-Y before the gamma-corrected Y, and gain corrected R-Y and B-Y are provided to the conversion circuit to generate RGB values. The gain circuit is driven by a signal Vc which corresponds to the average luminance level.

In contrast, claims 1 and 4 both recite that, for each pixel to be corrected, the input value of the luminance *before* correction and the output value of the luminance *after* correction are used to determine a scaling factor. Notably, claim 1 says:

"for each pixel to be corrected:

storing an input luminance value corresponding to a luminance of the pixel before color correction; . . .

determining an output luminance and output saturation corresponding to the color corrected components for the pixel;

determining a scaling factor according to a ratio of the input luminance to the output luminance"

Yamakawa does not teach determining a scaling factor for each pixel according to a ratio of the input luminance for the pixel and the output luminance (corresponding to the color corrected components) for the pixel. Instead, Yamakawa needs to use an average luminance (Vc) in a feedback loop to continually adjust the gain control circuit.

Further, claims 1 and 4 also recite that the values for the corrected pixel are the input luminance and the corrected saturation. The corrected saturation is the saturation of the color corrected components after those components are scaled by the scaling factor that was determined as the ratio of the input luminance to the output luminance. Notably claim 1 says:

"using the input luminance and the corrected saturation to provide values for the corrected pixel".

Yamakawa does not teach using the input luminance to provide values for the corrected pixel. Instead, Yamakawa uses a dynamic gamma corrected luminance value as the luminance for the corrected pixel.

In view of these differences between the claimed invention and Yamakawa, the rejection of claims 1 and 4 is traversed. The remaining claims are dependent claims which are allowable for at least the same reasons.

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CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any fee to **Deposit Account No. 50-0876.**

Respectfully submitted,

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